STAKEHOLDER ADVISORY GROUP

Board of Water Supply, City & County of Honolulu
February 26, 2026
Meeting 58

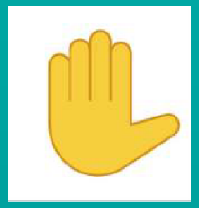
WELCOME & INTRODUCTIONS

DAVE EBERSOLD, FACILITATOR

STAKEHOLDER ADVISORY GROUP MEETING 58

FEBRUARY 26, 2026

VIRTUAL MEETING BEST PRACTICES

- Please stay muted unless you are speaking
- Use  or meeting chat to let us know you want to ask a question
- If you don’t have the “raise hand” function or meeting chat, unmute your mic/phone and speak
- Speak one person at a time
- Expect something to go wrong

MEETING OBJECTIVES

- Welcome and public comment
- Provide BWS updates
- WMP scorecard update for 2024
- New scorecard revisions
- Accept notes from meeting #57
- CIP process and prioritization
- Adjourn

ROADMAP TOWARDS WMP ADOPTION

PUBLIC COMMENT ON AGENDA ITEMS

BWS UPDATES

Ernest Lau, PE
Manager and Chief Engineer

boardofwatersupply.com

SCORECARD RESULTS AND METRIC REVISIONS

Carl Lundin
CDM Smith

boardofwatersupply.com

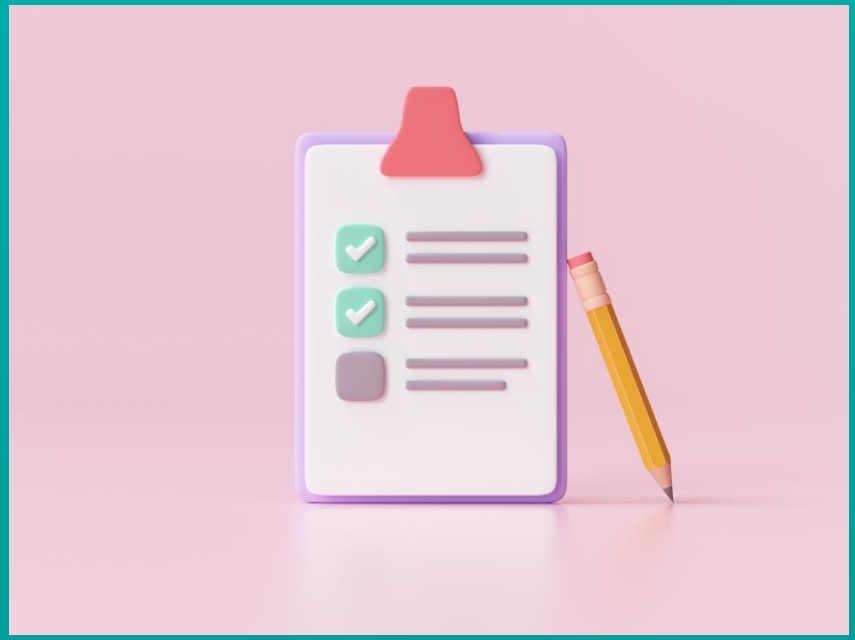
A SCORECARD WAS DEVELOPED TO TRACK IMPLEMENTATION OF THE 2016 WMP

- Part of WMP Section 13 – Implementation
- Intent was to measure implementation of WMP goals
- Presented to BWS Board annually

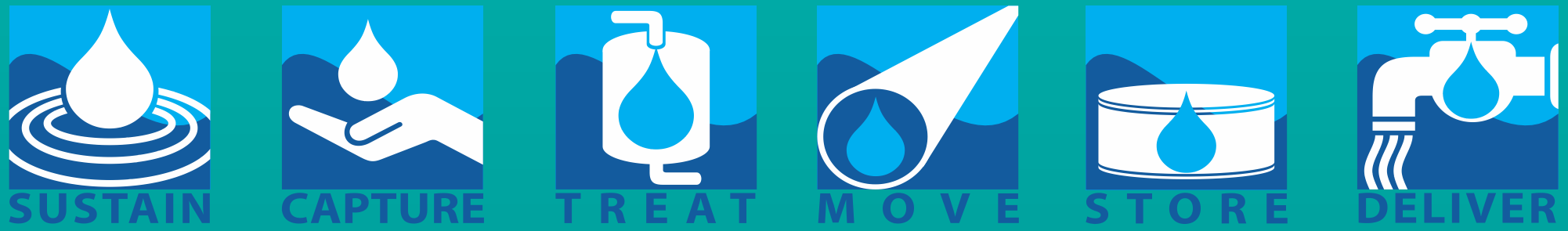
Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY16)	Meeting goal?
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year)					
	All years are fiscal years.					
Sustain ●						
Supply from nonpotable sources	% of total supply served from nonpotable water system	Measures the percentage of total supply that is served by nonpotable sources. The purpose of the metric is to encourage the use of appropriate quality sources for the intended use, and preserve pristine sources for potable use. Excludes brackish desalination and seawater desalination.	> 12%	Fresh Water Initiative, by 2030. Goal is to double wastewater reuse. *http://www.hawaiicommunityfoundation.org/file/cat/Fresh_Water_Blueprint_FINAL_062215_small.pdf*	6% (on-track to meet goal)	●
		Measures remaining available		Sustainable yield is the		

THE LAST SCORECARD UPDATE WAS FOR 2024 DATA

- 2024 results presented today
- Discuss each metric and consider revisions for 2026
- Provide feedback to BWS on Stakeholder Priorities

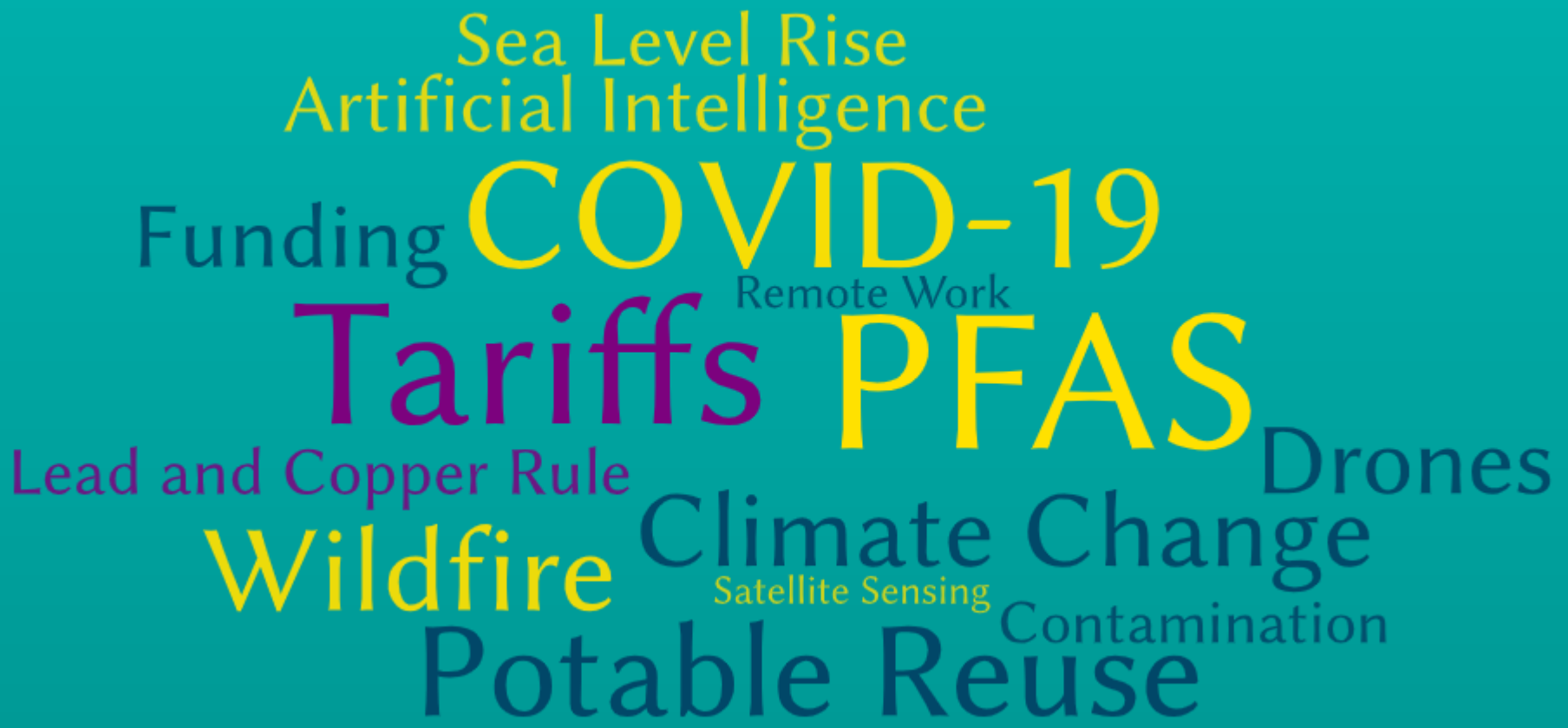


SCORECARD IS GROUPED BY FUNCTIONAL AREA



+ Tools and Planning

THE WORLD HAS CHANGED IN 10 YEARS…



Our metrics can change too.

AS YOU THINK ABOUT THE BWS WMP IMPLEMENTATION SCORECARD…

- What 3 to 5 things are **most** important to measure and report on?
- With 29 indicators, are we trying to measure too much and diluting the scorecard's impact?
- If so, what is least important and could be considered for deletion?
- What other revisions to indicators or metrics would you recommend?

Metric	Indicator
Sustain	Supply from nonpotable sources
	Annual water resource yield
	Watershed management
	Conservation
Capture	Standby source capacity
	Water level at index wells
	Permitted or assessed sustainable yield
Treat	Water quality regulatory compliance
	Treatment on-line
	Treatment system condition assessment
Move	Sufficient pump capacity
	Pumps available for use
	Emergency power
	Pump station condition assessment
Store	Reservoir restrictions
	Storage deficient pressure zones
	Reservoir condition assessment
Deliver	Pipeline breaks
	Transmission pipeline breaks
	Non-revenue water
	High risk pipelines
	Pipeline R&R
	Fire hydrant supply
	Pipeline leak detection
	PWA pipeline condition assessment
Tools and Planning	Water Mater Plan update
	Hydraulic models and CapPlan updated
	GIS update
	SCADA reliability

SUSTAIN

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Sustain ●							
Supply from nonpotable sources	% of total supply served from nonpotable water system	Measures the percentage of total supply that is served by nonpotable sources. The purpose of the metric is to encourage the use of appropriate quality sources for the intended use, and preserve pristine sources for potable use. Excludes brackish desalination and seawater desalination.	> 12%	Fresh Water Initiative, by 2030. Goal is to double wastewater reuse. *http://www.hawaiicommunityfoundation.org/file/cat/Fresh_Water_Blueprint_FINAL_062215_small.pdf*	6%	●	Lack of demand so far. Available supply.
Annual water resource yield	% of available water resource yield used	Measures remaining available State permitted use and BWS assessed sustainable yield island-wide. The purpose of this metric is to give an indication of when additional source will be needed.	< 90%	Sustainable yield is the maximum rate of withdrawl without detrimentally affecting the resource. 90% goal allows time to develop additional sources.	71%	●	

SUSTAIN

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Sustain ●							
Watershed management	$ budgeted for watershed management	Measures total amount budgeted for BWS priority watersheds that supply BWS sources. The purpose of this metric is to preserve the existing sustainable yield of the aquifer in the face of climate change.	4% of CIP $3.35M	Suggested by WRD based on review of other agencies, and identified need.	$1.1M	●	Limited by partner bandwidth.
	Acres of watershed surveyed for invasive plant species removal per year	Measures the area of BWS priority watersheds (26,085 acres) surveyed for invasive plant species per year. The purpose of this metric is to monitor invasive plant species removal, and determine if watershed management goals are being attained.	5,200 acres	OISC, WMWP, KMWP	87,530 acres	●	Aerial/satellite survey covers much more area.
Watershed management	Watershed area protected by fencing	Measures watershed funding dedicated to fencing installation and restoration of fenced areas in BWS priority watersheds. In the future, a restored and maintained fenced area goal will be developed.	20% of watershed funding	OISC, WMWP, KMWP, DLNR	0%	●	DLNR has moved to maintenance rather than new fence.

SUSTAIN

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Sustain ●							
Conservation	$ budgeted for conservation	Measures total amount budgeted for conservation. Efficient use of funding is managed through ROI evaluation of each project. The purpose of this metric is to protect and preserve potable water sources, minimize needed capacity expansions, and reduce costs associated with producing and supplying water.	4% of CIP $3.35M	Suggested by WRD based on review of other agencies, and identified need. Each conservation project must show positive ROI vs. installation of additional capacity.	$2.49M	●	
	Per capita consumption	Measures the effect of conservation programs on per capita consumption. The purpose of this metric is to determine if anticipated reductions in per capita demands as a result of conservation programs are being realized.	< 145 gpcd (by 2040, starting at 155 gpcd in 2016)	Suggested by WRD, based on current island-based regional trends and projection for future conservation.	142 gpcd	●	

CAPTURE

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Capture ●							
Standby source capacity	% of source capacity used at Maximum Day Demand (MDD)	Measures the total supply (pump and tunnel) capacity available to meet MDD. This metric is similar to "annual water resource yield", but instead measures the capacity of the infrastructure to meet MDD. The purpose of this metric is to give an indication of when additional pumping at existing sources or additional sources will be needed.	< 50%	Suggested in WMP. Should include enough standby for equipment redundancy and MDD variation from year to year.	42%	●	
Water level at index wells	% of wells with stable water levels as determined by BWS	Measures the water level at the index wells, and which are stable above Low Ground Water Levels. The purpose of this metric is to monitor the health of the groundwater aquifer and prevent detrimental impact to the source.	100%	Suggested by WRD.	100%	●	

CAPTURE

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Capture ●							
Standby source capacity	% of source capacity used at Maximum Day Demand (MDD)	Measures the total supply (pump and tunnel) capacity available to meet MDD. This metric is similar to "annual water resource yield", but instead measures the capacity of the infrastructure to meet MDD. The purpose of this metric is to give an indication of when additional pumping at existing sources or additional sources will be needed.	< 50%	Suggested in WMP. Should include enough standby for equipment redundancy and MDD variation from year to year.	42%	●	
Water level at index wells	% of wells with stable water levels as determined by BWS	Measures the water level at the index wells, and which are stable above Low Ground Water Levels. The purpose of this metric is to monitor the health of the groundwater aquifer and prevent detrimental impact to the source.	100%	Suggested by WRD.	100%	●	
Permitted or assessed sustainable yield	Number of sources exceeding source permitted use or assessed sustainable yield (12-month moving avg)	Measures the number of sources that are exceeding their permitted or assessed sustainable yield over the preceding 12 months. The purpose of this metric is to ensure individual sources are managed sustainably.	0	Suggested by WRD.	2	●	Driven by Hālawa Shaft offline.

TREAT

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Treat ● ● ●							
Water quality regulatory compliance	Number of water quality regulatory violations	Measures compliance with water quality regulations. The purpose of this metric is to ensure supply of water that is safe for intended use.	0	Per regulations.	0 →	●	
Treatment on-line	% of chlorination systems on-line	Measures the percentage of chlorination systems that are on-line. The purpose of this metric is to ensure proactive maintenance and presence of adequate standby systems to ensure sources are able to be used continuously.	100%	Suggested by WSO.	100%	●	
Comprehensive treatment system condition assessment	Perform comprehensive condition assessment of all potable and nonpotable treatment systems	The purpose of this metric is to track progress toward next update.	Update every 5 years	Suggested in WMP.	75% complete (last 2021)	●	

MOVE

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Move ● ●							
Sufficient pump capacity	% of pressure zones where firm capacity (not counting largest pumping unit at each station) < MDD	Measures if there is sufficient pump capacity throughout the system. The purpose of this metric is to highlight areas where additional pumping capacity is needed.	< 5%	Suggested in WMP.	3.0%	●	
Pumps available for use	% of pumps that are available to be put in-service	Measures the percentage of pumps that are available for service at any given time. The purpose of this metric is to ensure there is sufficient pumping capacity available for all demand conditions.	> 90%	Suggested by WSO. It is noted that 60% of the pumps will supply all demand conditions. The 90% goal recognizes the importance of standby and the long lead time necessary for pump repair and replacement.	67%	●	Pump refurbishment projects delayed. CPD working on recovery plan.
Emergency power	% of population served indoor demand (85gpcd) in the event of loss of power	Measures the percentage of the population that is able to receive sufficient indoor demand for basic needs in the event of a long-term, island-wide power failure. The purpose of this metric is to increase system reliability in the event of power failures.	> 85%, distributed geographically	Suggested in WMP. Based on the generator plan in the WMP, this level of service also supplies sufficient volume to meet 100% of island-wide indoor demand, but is only delivered to 85% of taps.	Completed 2024	●	
Pump station condition assessment	Perform regularly scheduled condition assessment	The purpose of this metric is to track progress toward next update.	Update every 5 years	Suggested in WMP.	Ongoing - 70% complete as of 10/2025	●	

STORE

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Store ●							
Reservoir restrictions	Number of reservoirs with use restrictions	Measures the number of reservoirs that have use restrictions, due to either structural or operational deficiencies. The purpose of this metric is to maximize the number of reservoirs available for unrestricted use.	< 2%		0.58%	●	
Storage deficient pressure zones	Pressure zones with less than Standard storage and without pumping or transmission equivalency to meet operating, emergency, and fire needs	Measures the number of pressure zones with less than the volume of storage required by the measured MDD Standards and without equivalency. The purpose of this metric is to ensure that sufficient storage volume is available across the system.	0%		10%	●	
Reservoir condition assessment	Perform regularly scheduled condition assessment	The purpose is early identification of reservoir deficiencies	Update every 10 years	Suggested in WMP.	Done	●	

DELIVER

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Deliver ●●●●●●							
Pipeline breaks	Pipeline breaks and leaks repaired per 100 miles per year (3-year average)	Measures the 3-year annual average break rate across the BWS system. The purpose of this metric is to track the overall condition of the pipelines, and can be used to monitor individual zones.	< 15	"Main Breaks, Leakage, and Distribution System Evaluations", WRF (ASCE Pipelines 2016)	17	●	
	Pipeline breaks and leaks repaired per year (3-year average)	Measures the 3-year annual average total break count across the BWS system. The purpose of this metric is to track the overall condition of the pipelines.	< 300	BWS is currently at half of AWWA median value. Even though system is aging, goal is to not let number of pipeline breaks increase.	353	●	Have begun to track "leaks" vs "breaks".
Transmission pipeline breaks	Number of pipeline breaks for ≥ 16 inches in diameter (3-year average)	Measures the 3-year annual average large diameter break count across the BWS system. The purpose of this metric is to minimize the damage and disruption caused by transmission pipeline failures.	< 14	Transmission is 18.5% of system. This proportion of 300 breaks per year would equal 55.5 breaks. 14 breaks is 25% of this portion indicative of a lower allowable break rate on transmission pipelines.	15	●	
Non-revenue water	% of water produced but not sold	Measures the percentage of water that is produced from sources, but not sold to a customer. The purpose of this metric is to track the amount of water lost from the system, and evaluate meter calibration and leak repair efforts.	< 8.1%	AWWA Benchmarking 2012, median non-revenue water %.	15.56%	●	WRD project to reduce apparent losses.

DELIVER

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	🟢(met/on track to meet, +1) 🟡(miss by < 10% of goal, 0) 🔴(miss by > 10% of goal, -1) ↓(trend arrow from previous year) All years are fiscal years.						
Deliver 🔴🔴🔴🔴🔴							
High risk pipelines	Portion of pipelines with risk score > 400	Measures the percentage of pipelines that have a high risk score. The purpose of this metric is to track the reduction of overall pipeline risk as the high-risk pipelines are replaced.	< 5%	Suggested in WMP.	17%	🔴	
Pipeline R&R	Miles of system pipeline renewed (3-year average)	Measures miles of pipelines renewed on a 3-year average. The purpose of this metric is to track pipeline renewal.	21 miles	Suggested in WMP based on AWWA Benchmarking and KANEW analysis.	2.8	🔴	
Fire hydrant supply	Hydrants that meet fire flow standards	Measures percentage of fire hydrants meeting fire flow standards per hydraulic modelling.	> 99%	Suggested in WMP.	99%	🟢	
Pipeline leak detection	% of pipes checked for leaks per year	Measures the percentage of pipelines that were checked for leaks. The purpose of this metric is to track progress toward the goal for leak detection.	25%	Suggested by FO.	10%	🔴	Have moved to satellite leak detection.
PWA pipeline condition assessment	Of pipelines recommended for PWA by CapPlan framework (currently 63 miles), miles assessed per year	Measures the miles of pipelines that are recommended for PWA condition assessment that were tested per year. The purpose of this metric is to track progress toward the goal for PWA condition assessment.	6.3 miles (10%)	Suggested in WMP, CapPlan decision framework.	0	🔴	Decided technology isn't yet mature after several pilot studies.

TOOLS AND PLANNING

Indicator	Metric	Purpose of Metric	Goal	Source of Goal	Actual (FY24)	Meeting goal?	2026 Comments
Legend	● (met/on track to meet, +1) ● (miss by < 10% of goal, 0) ● (miss by > 10% of goal, -1) ↓ (trend arrow from previous year) All years are fiscal years.						
Tools and Planning ● ●							
Water Mater Plan update		The purpose of this metric is to track progress toward next update.	Update every 10 years	Suggested in WMP.	Target 2026	●	
Hydraulic models and CapPlan updated		The purpose of this metric is to track progress toward next update.	Update every 5 years	Suggested in WMP.	Done	●	
GIS update		The purpose of this metric is to track progress toward next update.	Annually	Suggested in WMP.	Done	●	
SCADA reliability	% of sources, pump stations, water treatment plants, and reservoirs utilizing microwave backbone for control data	Measures the percentage of core facilities (key for water service) with control data communication that utilizes the microwave backbone. The purpose of this metric is to track the conversion of facilities using hardwired communication to the redundant microwave system.	100% (by 2023)	Transition from hardwired communication to existing microwave backbone.	86%	●	

AS YOU THINK ABOUT THE BWS WMP IMPLEMENTATION SCORECARD…

- What 3 to 5 things are **most** important to measure and report on?
- With 29 indicators, are we trying to measure too much and diluting the scorecard's impact?
- If so, what is least important and could be considered for deletion?
- What other revisions to indicators or metrics would you recommend?

ACCEPT MEETING NOTES FROM MEETING 55

David Ebersold
Facilitator

www.boardofwatersupply.com

CAPITAL IMPROVEMENT PLAN PROCESS AND PRIORITIZATION

Carl Lundin
CDM Smith

boardofwatersupply.com

CIP PROCESS

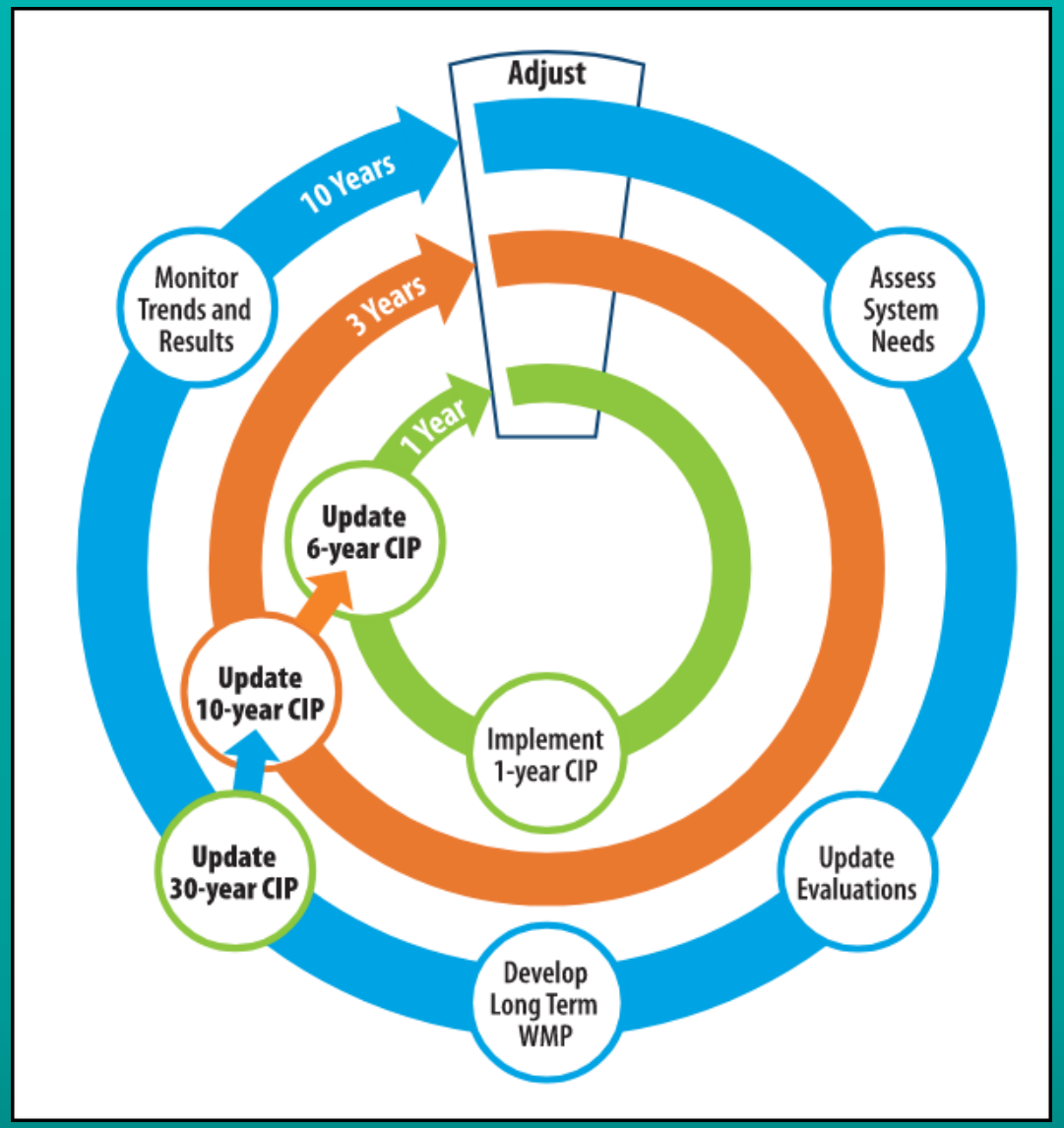
Tech Evaluations identify required projects

Costs/schedules are estimated

Prioritization score is developed

Projects are scheduled

Prioritized 30-year CIP

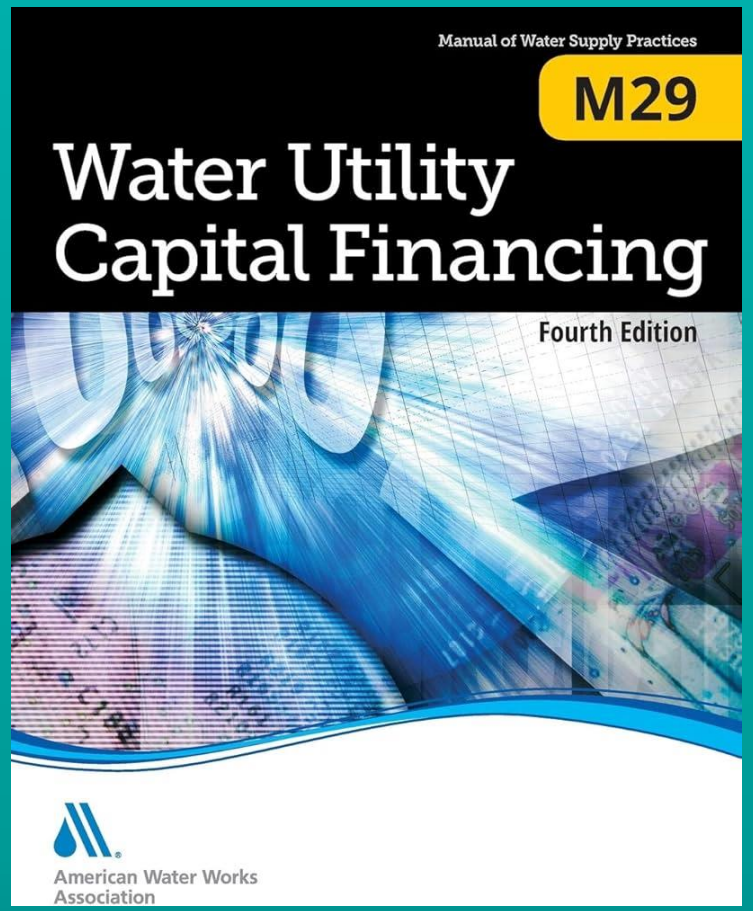


PROJECT PRIORITIZATION

- 2016 CIP Prioritization was based on AWWA M29 best practices tailored to BWS-specific needs
- M29 metrics focus on risk-based scoring

Likelihood of Failure ✖ Consequence of Failure = Total Risk

→ Planning to maintain similar framework



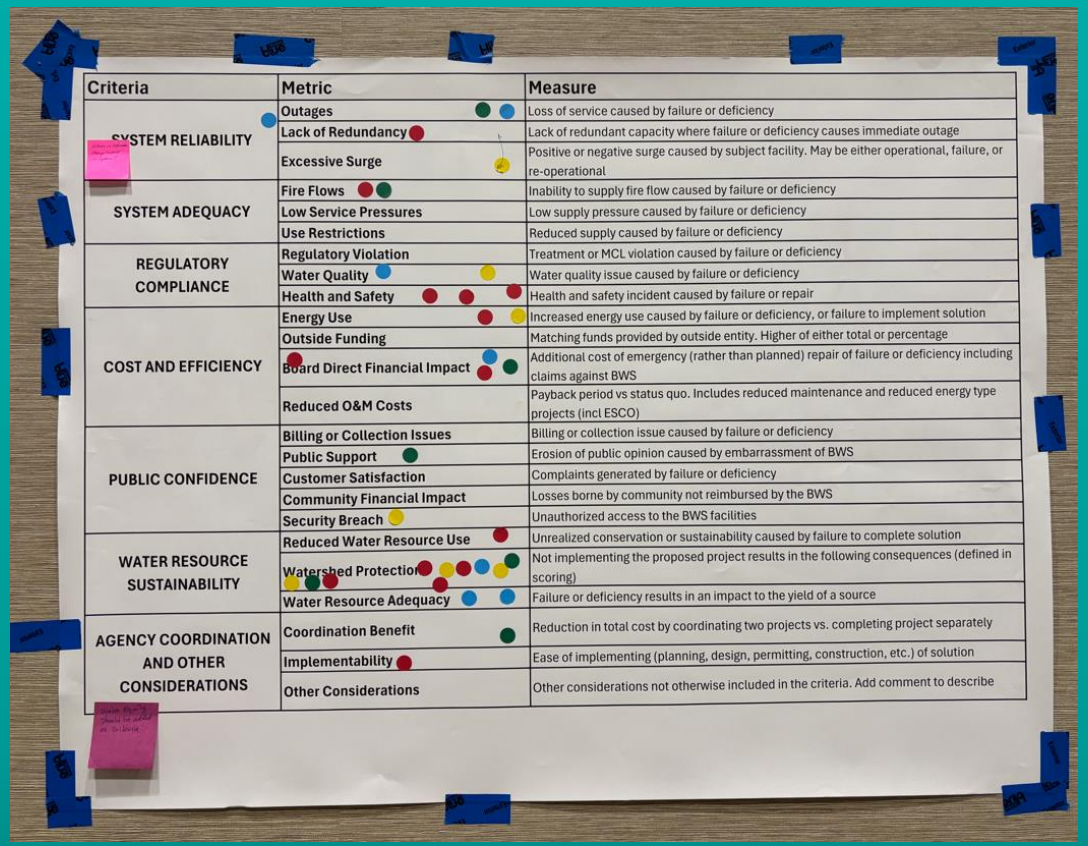
PROJECT PRIORITIZATION

- **Renewal & Replacement projects:** based on risk (likelihood of failure x consequence of failure)
- **Research & Development projects:** risk and schedule-based
- **Capacity Expansion projects:** date they must be operational

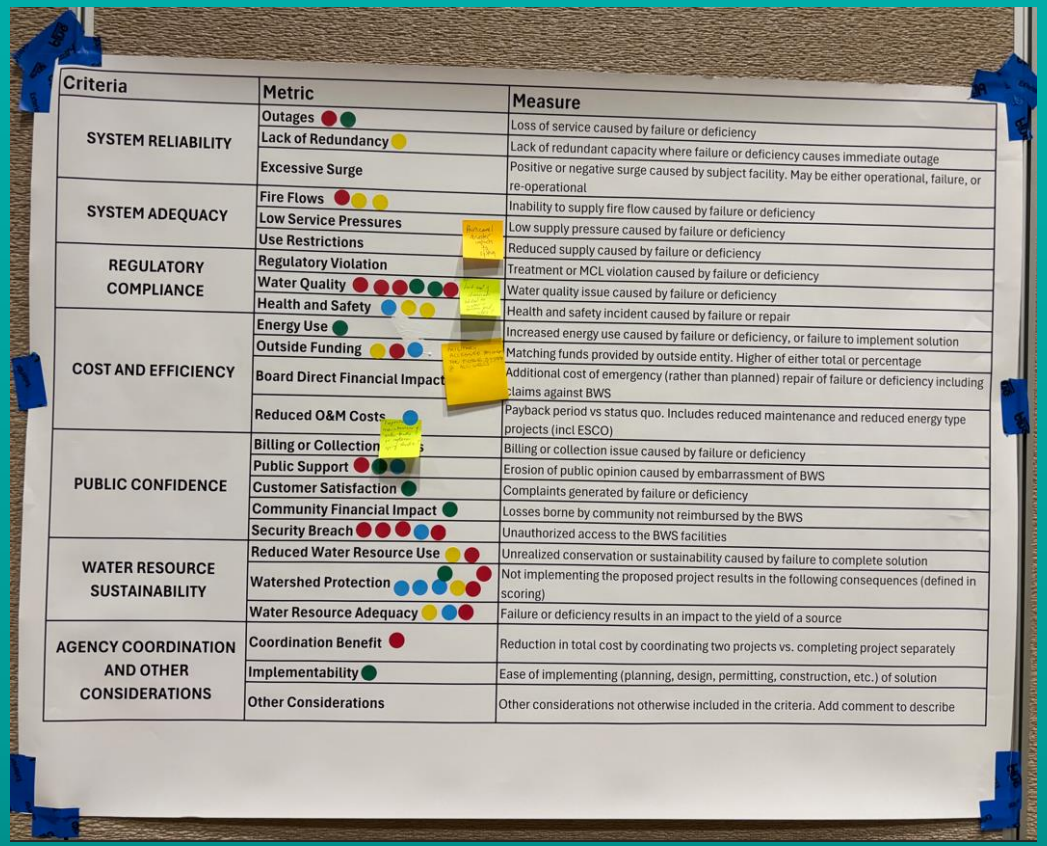
- Risk evaluation varies by asset type.
- Previous condition assessment scoring is retained unless new data is available

Criteria	Metric	Safe	Dependable	Affordable
System Reliability	Outages		💧	
	Loss of Redundancy		💧	
	Excessive Surge		💧	
System Adequacy	Fire Flows		💧	
	Low Service Pressures		💧	
	Use Restrictions		💧	
Regulatory Compliance	Regulatory Violation	💧		
	Water Quality	💧		
	Health and Safety	💧		
Cost and Efficiency	Energy Use			💧
	Outside Match Funding			💧
	Board Direct Financial Impact			💧
	Reduced O&M Costs			💧
Public Confidence	Billing or Collection Issues		💧	
	Public Support	💧	💧	
	Customer Satisfaction	💧	💧	💧
	Community Financial Impact		💧	
	Security Breach	💧	💧	
Water Resource Sustainability	Reduced Water Resource Use		💧	
	Watershed Protection	💧	💧	
	Water Resource Adequacy		💧	
Agency Coordination and Other Considerations	Coordination Benefit			💧
	Implementability			💧
	Other Considerations			

IN JANUARY, YOU WERE GIVEN AN OPPORTUNITY TO COMMENT ON PRIORITIZATION METRICS



Criteria	Metric	Measure
SYSTEM RELIABILITY	Outages	Loss of service caused by failure or deficiency
	Lack of Redundancy	Lack of redundant capacity where failure or deficiency causes immediate outage
	Excessive Surge	Positive or negative surge caused by subject facility. May be either operational, failure, or re-operational
SYSTEM ADEQUACY	Fire Flows	Inability to supply fire flow caused by failure or deficiency
	Low Service Pressures	Low supply pressure caused by failure or deficiency
	Use Restrictions	Reduced supply caused by failure or deficiency
REGULATORY COMPLIANCE	Regulatory Violation	Treatment or MCL violation caused by failure or deficiency
	Water Quality	Water quality issue caused by failure or deficiency
	Health and Safety	Health and safety incident caused by failure or repair
COST AND EFFICIENCY	Energy Use	Increased energy use caused by failure or deficiency, or failure to implement solution
	Outside Funding	Matching funds provided by outside entity. Higher of either total or percentage
	Board Direct Financial Impact	Additional cost of emergency (rather than planned) repair of failure or deficiency including claims against BWS
	Reduced O&M Costs	Payback period vs status quo. Includes reduced maintenance and reduced energy type projects (incl ESCO)
PUBLIC CONFIDENCE	Billing or Collection Issues	Billing or collection issue caused by failure or deficiency
	Public Support	Erosion of public opinion caused by embarrassment of BWS
	Customer Satisfaction	Complaints generated by failure or deficiency
	Community Financial Impact	Losses borne by community not reimbursed by the BWS
	Security Breach	Unauthorized access to the BWS facilities
WATER RESOURCE SUSTAINABILITY	Reduced Water Resource Use	Unrealized conservation or sustainability caused by failure to complete solution
	Watershed Protection	Not implementing the proposed project results in the following consequences (defined in scoring)
	Water Resource Adequacy	Failure or deficiency results in an impact to the yield of a source
AGENCY COORDINATION AND OTHER CONSIDERATIONS	Coordination Benefit	Reduction in total cost by coordinating two projects vs. completing project separately
	Implementability	Ease of implementing (planning, design, permitting, construction, etc.) of solution
	Other Considerations	Other considerations not otherwise included in the criteria. Add comment to describe



Criteria	Metric	Measure
SYSTEM RELIABILITY	Outages	Loss of service caused by failure or deficiency
	Lack of Redundancy	Lack of redundant capacity where failure or deficiency causes immediate outage
	Excessive Surge	Positive or negative surge caused by subject facility. May be either operational, failure, or re-operational
SYSTEM ADEQUACY	Fire Flows	Inability to supply fire flow caused by failure or deficiency
	Low Service Pressures	Low supply pressure caused by failure or deficiency
	Use Restrictions	Reduced supply caused by failure or deficiency
REGULATORY COMPLIANCE	Regulatory Violation	Treatment or MCL violation caused by failure or deficiency
	Water Quality	Water quality issue caused by failure or deficiency
	Health and Safety	Health and safety incident caused by failure or repair
COST AND EFFICIENCY	Energy Use	Increased energy use caused by failure or deficiency, or failure to implement solution
	Outside Funding	Matching funds provided by outside entity. Higher of either total or percentage
	Board Direct Financial Impact	Additional cost of emergency (rather than planned) repair of failure or deficiency including claims against BWS
	Reduced O&M Costs	Payback period vs status quo. Includes reduced maintenance and reduced energy type projects (incl ESCO)
PUBLIC CONFIDENCE	Billing or Collection	Billing or collection issue caused by failure or deficiency
	Public Support	Erosion of public opinion caused by embarrassment of BWS
	Customer Satisfaction	Complaints generated by failure or deficiency
	Community Financial Impact	Losses borne by community not reimbursed by the BWS
	Security Breach	Unauthorized access to the BWS facilities
WATER RESOURCE SUSTAINABILITY	Reduced Water Resource Use	Unrealized conservation or sustainability caused by failure to complete solution
	Watershed Protection	Not implementing the proposed project results in the following consequences (defined in scoring)
	Water Resource Adequacy	Failure or deficiency results in an impact to the yield of a source
AGENCY COORDINATION AND OTHER CONSIDERATIONS	Coordination Benefit	Reduction in total cost by coordinating two projects vs. completing project separately
	Implementability	Ease of implementing (planning, design, permitting, construction, etc.) of solution
	Other Considerations	Other considerations not otherwise included in the criteria. Add comment to describe

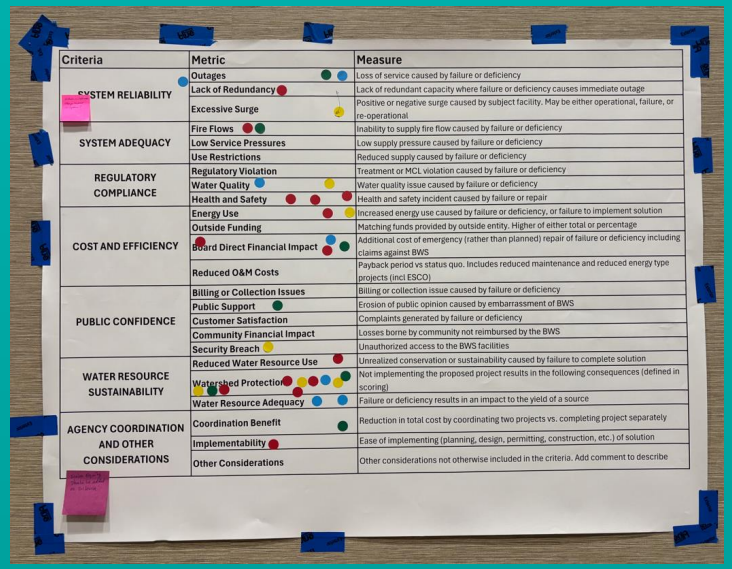
WHAT WE DID IN RESPONSE

- **Increased maximum score of Security Breach to 5**
- **Increased maximum score of Watershed Protection to 5**
- **Definition of Water Quality Metric modified:**
  - **include contamination**
- **Definition of Outside Funding Metric modified:**
  - **include Military funding**

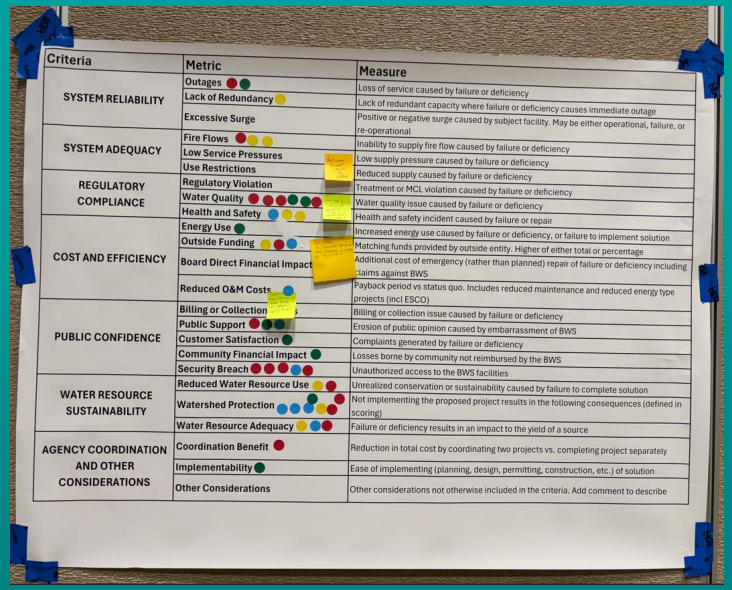
Criteria	PUBLIC CONFIDENCE	Criteria	WATER RESOURCE
Metric	Security Breach	Metric	Watershed Protection (1)
Measure	Unauthorized access to the BWS facilities	Measure	Not implementing the proposed project results in the following consequences
Goal	S/D - Secure facilities to minimize theft, vandalism, or damage	Goal	S/D - Improve the health of the watershed environment and improve water quality
5	• Theft/ damage ≥ $1 million	5	• Causes irreparable and significant damage to ≥ 10,000 acres of watershed
4	• Theft/ damage $500k–$1 million	4	• Causes irreparable and significant damage to 5,000 - 10,000 acres of watershed
3	• Theft/ damage $250k–$500k	3	• Causes irreparable and significant damage to 1,000 - 5,000 acres of watershed
2	• Theft/ damage < $250k	2	• Causes irreparable and significant damage to < 1,000 acres of watershed
1	• Unauthorized access to BWS Facility	1	• Causes reparable moderate damage to watershed
0	Not Applicable	0	Not Applicable

ADDED WATER EQUITY AS A NEW METRIC

- **How should this be defined and scored?**
  - **0: No impact to water equity**
  - **1:**
  - **2:**
  - **3: Significant impact to water equity**



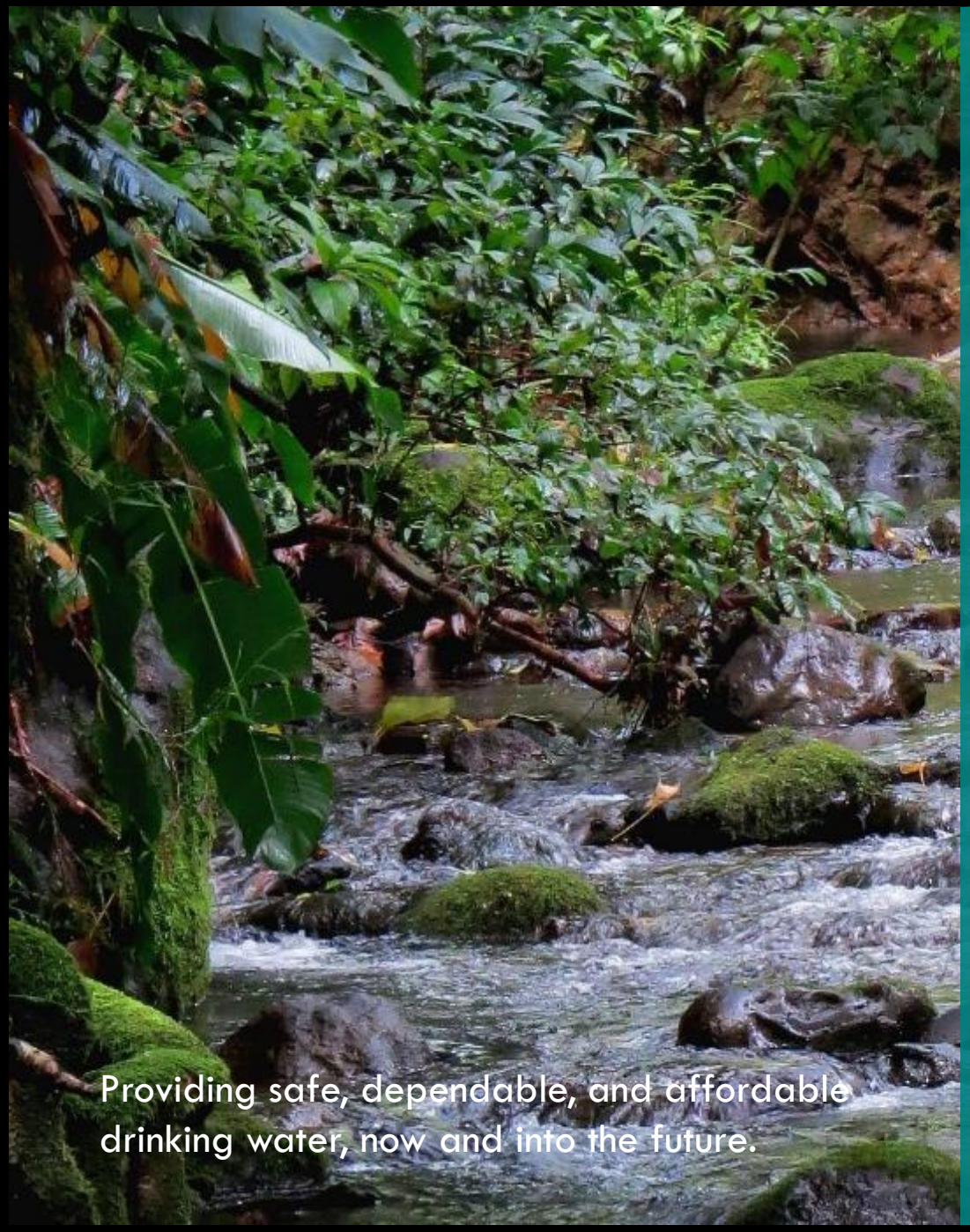
Criteria	Metric	Measure
SYSTEM RELIABILITY	Outages	Loss of service caused by failure or deficiency
	Lack of Redundancy	Lack of redundant capacity where failure or deficiency causes immediate outage
	Excessive Surge	Positive or negative surge caused by subject facility. May be either operational, failure, or re-operational
SYSTEM ADEQUACY	Fire Flows	Inability to supply fire flow caused by failure or deficiency
	Low Service Pressures	Low supply pressure caused by failure or deficiency
	Use Restrictions	Reduced supply caused by failure or deficiency
REGULATORY COMPLIANCE	Regulatory Violation	Treatment or MCL violation caused by failure or deficiency
	Water Quality	Water quality issue caused by failure or deficiency
	Health and Safety	Health and safety incident caused by failure or repair
COST AND EFFICIENCY	Energy Use	Increased energy use caused by failure or deficiency, or failure to implement solution
	Outside Funding	Matching funds provided by outside entity. Higher of either total or percentage
	Board Direct Financial Impact	Additional cost of emergency (rather than planned) repair of failure or deficiency including claims against BWS
	Reduced O&M Costs	Payback period vs status quo. Includes reduced maintenance and reduced energy type projects (incl ESCO)
PUBLIC CONFIDENCE	Billing or Collection Issues	Billing or collection issue caused by failure or deficiency
	Public Support	Erosion of public opinion caused by embarrassment of BWS
	Customer Satisfaction	Complaints generated by failure or deficiency
	Community Financial Impact	Losses borne by community not reimbursed by the BWS
	Security Breach	Unauthorized access to the BWS facilities
WATER RESOURCE SUSTAINABILITY	Reduced Water Resource Use	Unrealized conservation or sustainability caused by failure to complete solution
	Watershed Protection	Not implementing the proposed project results in the following consequences (defined in scoring)
	Water Resource Adequacy	Failure or deficiency results in an impact to the yield of a source
AGENCY COORDINATION AND OTHER CONSIDERATIONS	Coordination Benefit	Reduction in total cost by coordinating two projects vs. completing project separately
	Implementability	Ease of implementing (planning, design, permitting, construction, etc.) of solution
	Other Considerations	Other considerations not otherwise included in the criteria. Add comment to describe



Criteria	Metric	Measure
SYSTEM RELIABILITY	Outages	Loss of service caused by failure or deficiency
	Lack of Redundancy	Lack of redundant capacity where failure or deficiency causes immediate outage
	Excessive Surge	Positive or negative surge caused by subject facility. May be either operational, failure, or re-operational
SYSTEM ADEQUACY	Fire Flows	Inability to supply fire flow caused by failure or deficiency
	Low Service Pressures	Low supply pressure caused by failure or deficiency
	Use Restrictions	Reduced supply caused by failure or deficiency
REGULATORY COMPLIANCE	Regulatory Violation	Treatment or MCL violation caused by failure or deficiency
	Water Quality	Water quality issue caused by failure or deficiency
	Health and Safety	Health and safety incident caused by failure or repair
COST AND EFFICIENCY	Energy Use	Increased energy use caused by failure or deficiency, or failure to implement solution
	Outside Funding	Matching funds provided by outside entity. Higher of either total or percentage
	Board Direct Financial Impact	Additional cost of emergency (rather than planned) repair of failure or deficiency including claims against BWS
	Reduced O&M Costs	Payback period vs status quo. Includes reduced maintenance and reduced energy type projects (incl ESCO)
PUBLIC CONFIDENCE	Billing or Collection	Billing or collection issue caused by failure or deficiency
	Public Support	Erosion of public opinion caused by embarrassment of BWS
	Customer Satisfaction	Complaints generated by failure or deficiency
	Community Financial Impact	Losses borne by community not reimbursed by the BWS
	Security Breach	Unauthorized access to the BWS facilities
WATER RESOURCE SUSTAINABILITY	Reduced Water Resource Use	Unrealized conservation or sustainability caused by failure to complete solution
	Watershed Protection	Not implementing the proposed project results in the following consequences (defined in scoring)
	Water Resource Adequacy	Failure or deficiency results in an impact to the yield of a source
AGENCY COORDINATION AND OTHER CONSIDERATIONS	Coordination Benefit	Reduction in total cost by coordinating two projects vs. completing project separately
	Implementability	Ease of implementing (planning, design, permitting, construction, etc.) of solution
	Other Considerations	Other considerations not otherwise included in the criteria. Add comment to describe

STAKEHOLDER MEETINGS THROUGH 2026

Type	Date	Topic	Stakeholder Input
In-Person	15-Jan-26	2026 WMP Roadmap CIP Process and Prioritization	WMP Input Milestones CIP Priorities
Virtual	26-Feb-26	Existing scorecard update New Scorecard Objectives CIP Prioritization Methodology	New Scorecard Priorities
Virtual	19-Mar-26	Condition Assessment Results Preliminary Climate Resilience Options	Preferences for level of climate facility mitigation
In-Person	16-Apr-26	Demand Projections Potential Additional Supplies	Preferences for supply hardening and diversification
In-Person	16-Jul-26	Major Findings Draft CIP	Input on CIP Priorities and Funding Levels
Virtual	17-Sep-26	One Water Coordination	Feedback on One Water CIP Integration
In-Person	15-Oct-26	Draft Reports and Policy Feedback: WMP, CIP, LRFP, WSFC	Feedback on overall plan and policy recommendations to BWS Board
Virtual	19-Nov-26	Feedback and Discussion	Feedback on overall plan and policy recommendations to BWS Board
In-Person	15-Jan-27	Recommendations to the Board: WMP, CIP, LRFP, WSFC	Feedback on overall plan and policy recommendations to BWS Board
In-Person	15-Apr-27	Draft WMP Final Review	Concurrence with Board-approved Draft WMP
In-Person	15-Jul-27	Final WMP and Summaries (pending Board Adoption)	Recommendation for Board adoption of Final WMP



Providing safe, dependable, and affordable drinking water, now and into the future.

Mahalo!